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DOES THE THEATER COMMANDER *REALLY* KNOW THE ENEMY?

A CASE FOR THE STANDING THEATER "RED CELL"

by

Donald L. Cline II
CDR, USN

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Maritime Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Donald L. Cline II

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Faculty Advisor: James R. FitzSimonds

CAPT James R. FitzSimonds, USN

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I. INTRODUCTION

Although future threats are fluid and unpredictable, U.S. forces are likely to confront a variety of challenges across the spectrum of conflict including efforts to deny our forces access to critical regions, urban warfare, information warfare, and attacks from chemical and biological weapons.

President William J. Clinton
A National Security Strategy for a New Century

For over fifty years, U.S. military doctrine, training and hardware purchases reflected the fiscal and military challenges of deterring a formidable military peer. Indeed, during the Cold War, the predominance of the Soviet threat and the bi-polar nature of superpower competition allowed for substantial continuity in U.S. defense planning and force development.¹ With the dissolution of the Soviet Union in 1991, defense planners, strategists, tacticians, and operators have all faced the fundamental need to refocus upon the numerous military threats, both conventional and unconventional, which exist across the spectrum of conflict. New concepts such as *Joint Vision 2010 (JV 2010)* are an attempt to respond to dynamic changes concerning potential adversaries, technological changes and their implications and the emerging importance of information superiority in the twenty-first century.² However numerous and diverse our future opponents may be in a multi-polar world, they share one common attribute: they are unlikely to duplicate our enemy from a previous conflict. Some military experts would argue that despite the changing nature of our potential adversaries, the potent combination of new weapons systems and tactics would dominate any future battlefield. Stealth aircraft, cruise missiles, precision guided munitions (PGMs) and command, control, communications, computers, and intelligence, surveillance and reconnaissance (C4ISR) systems have, some observers say, revolutionized warfare to the extent that the United States (U.S.) will dominate any opponent, or coalition of opponents, on future battlefields for the foreseeable future.

Meanwhile, our potential adversaries have not remained idle. The concrete and less tangible lessons of Operation DESERT STORM and Operation ALLIED FORCE have not been lost on less well-equipped military adversaries world-wide. Overwhelming U.S. conventional (read "high technology") military superiority may deter a military challenge-in-kind from a future adversary, but this same superiority has an unintended consequence -- it is inspiring considerable thought and action in new military arenas such as asymmetric warfare, asynchronous warfare, and cybernetic warfare. Although each of these modes of warfare can be applied in concert or in isolation, they each seek to exploit the weakness of a more powerful conventional adversary, such as the United States, to achieve decisive results while avoiding the fore-mentioned enemy's strengths. Given the dynamic and unpredictable nature of future military operations, has the U.S. military, specifically at the level of the theater Commander-in-Chief (CINC), fundamentally changed the way in which it operationally plans to fight a future armed conflict?

This author contends that current operational planning is ill-suited to planning operations against a future asymmetric adversary and countering the reactive operations of such an adversary. This author proposes the establishment of a standing "Red Cell" on each theater CINC staff to improve operational planning against future adversaries employing conventional warfare, asymmetric warfare, or an adaptation of both. This paper will provide a brief overview of past operational planning pitfalls and an overview of the proposed "Red Cell. It will further detail the proposed composition and methodology of the theater "Red Cell" as it attempts to answer the following questions: 1) What are enemy operational objectives and how is he trying to achieve them?; 2) What approach is the enemy exploiting to force friendly (U.S. or U.S. coalition/alliance) culmination?; and 3) What friendly approach will cause the enemy to

acknowledge his own culmination? The ability to prevent one's own culmination while causing the enemy to reach his is one of the prerequisites to operational success.³ Finally, potential theater "Red Cell" challenges and proposed solutions will be detailed.

Ultimately, this author will demonstrate that, lacking access to the rigorous, adaptive analysis of the proposed standing "Red Cell", the CINC may be vulnerable to enemies whose twenty-first century visions, objectives and means are profoundly different than our technologically-based preconceptions.

II. WHY ESTABLISH THE "RED CELL"?

When you are ignorant of the enemy but know yourself; your chances of winning or losing are equal. If ignorant of both your enemy and yourself, you are certain in every battle to be in peril.

Sun Tzu
The Art of War

Do we *really* know our enemy and, as importantly, how our enemy sees *our* strengths and weaknesses? Despite our relative technical superiority and information superiority in late twentieth century conflicts, U.S. military history is punctuated by repeated failures to understand our enemies, their motivations, and their true critical strengths and vulnerabilities. U.S. preconceptions about the will of the North Vietnamese people during the Vietnam War led to the costly (and ineffective) Rolling Thunder air operations from 1965 to 1968. A key misconception was to correlate the loss of industrial capability and public utilities with an ability to affect the will of the North Vietnamese people (a strategic center of gravity).⁴ Yet the primarily agrarian North Vietnamese population remained relatively unaffected. The inability or unwillingness to understand the Viet Cong and the North Vietnamese who were, despite the popular tendency to

consider them a monolithic opponent, two distinctly different entities, contributed to military failures from the unit tactical level to the highest national strategic level.

In more recent conflicts, such as Operation DESERT STORM and Operation ALLIED FORCE, tactical intelligence employed state-of the-art systems such the Joint Surveillance and Targeting System (JSTARS) aircraft, unmanned aerial vehicles (UAVs) and overhead imagery. Intelligence professionals were relatively successful in maintaining an accurate order of battle (OOB) picture of a tactically unskilled enemy such as the Iraqis. Less successful were operational intelligence efforts designed to determine the effects of operational fires and operational maneuver upon enemy combat power and predict the culmination of enemy combat power. Why? Because in the quest to shape acquired data into intelligence, cultural biases, mirror imaging and current expectations clouded the analytic process of determining the enemy's operational center of gravity and applying the means to force premature culmination. The "Red Cell" is a human-based process designed to marry the technologically impressive capabilities of the U.S. intelligence community and military services with a methodology encompassing military assessments and in-depth analysis of cultural/religious/political dynamics. "Red Cell" interaction in the operational planning process will enable the theater commander to more accurately assess how a potential adversary "sees" and "acts".

III. PREVIOUS "RED CELL INITIATIVES / FUTURE SCOPE

Our people will make the difference, if we give them the resources to accomplish the task

Clark L. Staten

Asymmetric Warfare, the Evolution and Devolution of
Terrorism; The Coming Challenge for Emergency and
National Security Forces

The "Red Cell" concept is not new. During the Cold War, each service had units specifically tasked to duplicate Soviet tactics, such as the Army's Opposing Force (OPFOR) at the National Training Center, the Navy's adversary fighter squadrons and SEAL "Red Cell", or the Air Force's aggressor fighter squadrons at Nellis Air Force Base. The benefits derived from these "Red Cell" organizations were primarily at the tactical level and were directed at specific services or service components.

In the post-Cold War environment, limited expansion of the "Red Cell" concept has occurred. Resident in the Office of Naval Intelligence (ONI) are three improved "Red Cell"-like organizations which support the tactical warfighter: Strike Projection Evaluation Anti-Air Warfare Research (SPEAR); Submarine Warfare Operations Research Division (SWORD); and Surface Analysis Branch Evaluations and Reporting (SABER). Expanding upon the concept of previous organizations, SPEAR, SWORD and SABRE meld traditional intelligence with assessments of enemy doctrine and training by "operators". Each organization employs warfare qualified personnel (such as aviators, submariners, and surface warriors), in conjunction with dedicated intelligence analysts, to provide tailored, tactical net assessments of specific warfare areas, such as strike warfare, undersea warfare, and expeditionary warfare, respectively, to maritime forces. Although SPEAR, SABER, and SWORD provide an improved knowledge of enemy capabilities, the tactical focus of their analysis is not sufficiently broad to meet the operational planning requirements of the theater commander.

An example of a contemporary joint "Red Cell" is the Information Warfare Red Team (IWRT) (established in 1995 at the Joint Command and Control Warfare Center (JC2WC)) that currently operates from the Joint Information Operations Center (JIOC), U.S. Space Command. The IWRT goal is to identify information systems vulnerabilities, through demonstrations and actual (exercise) information warfare (IW) attacks to increase awareness and provide training in a stressed environment.⁵ Colonel Charles J. Dunlap, Jr., a frequent defense observer, has even proposed a "Red Team" assessment of *JV 2010* to reveal possible unintended consequences and preclude a "mantle of infallibility whereby merely challenging its (JV 2010s) assumptions is regarded blasphemous".⁶ These contemporary applications of the "Red Cell" concept should be expanded further to encompass the spectrum of operational functions assigned to a theater commander.

The theater "Red Cell", as proposed in this paper, is dedicated to broadening the commander's true awareness of the enemy and gain insight into an enemy's culturally distinct perception. A branch of the well-known defense information specialists, Jane's Information Group, currently employs the "Red Cell" (or OPFOR) approach in its international military consultancy. Jane's Consultancy provides an ad-hoc grouping of former military officers, security experts and geo-political experts from around the world, called the GLOBAL OPFOR, to model scenarios in both unconventional and conventional environments ranging from the tactical level to the strategic level.⁷ Peter Baxter, the Program Manager for Jane's GLOBAL OPFOR, states,

Putting together an OPFOR that has a bunch of innovative high-powered thinkers who can fool the Blue team is of little value. Our approach is to give you an opposing force that is practiced in the operational art you are likely to face and *of the culture* (emphasis added) you are likely to fight."⁸

Acknowledging that our current theater force structure and systems possess vulnerabilities exploitable by a wide range of adversaries, how would such a "Red Cell" (OPFOR) organization be formed within the CINC's staff and operated to enhance theater operational functions and reduce exploitation of friendly vulnerabilities?

IV. PROPOSED THEATER "RED CELL" CHARTER / FUNCTIONALITY

It (intelligence) must contribute to the JFC's understanding of the adversary and the JFC's own situation relative to the adversary

Joint Pub 2-0: Joint Doctrine for Intelligence Support to Operations

The proposed theater CINC "Red Cell" charter is defined as follows:

The theater CINC "Red Cell" is an independent vulnerability assessment team that targets the entire range of operational functions for the purpose of assessing the CINC Theater Engagement Plan (TEP) and operational planning vulnerabilities, conducts risk management, and proposes appropriate solutions, thereby increasing the theater Commander's ability to conduct combat operations.

Although seemingly broad in scope, the unique "Red Cell" perspective is focused upon the application of its analytic skills to the varied challenges found within a particular peacetime Area of Responsibility (AOR). The "Red Cell" charter is committed to scrutinizing the entire range of enemy operational functions within the CINC's AOR. Indeed, Joint Pub 2-0 recognizes that the J-2 and the intelligence staff must develop and continuously refine their ability to think like the adversary. Given this multi-dimensional nature of the potential analytic problem, which ranges from logistics to operations to combat support to terrorism, the potential solution should be multi-disciplinary and draw upon the human resources of every directorate within the theater CINC staff.

Certain "Red Cell" associated functions, such as Indications and Warning (I&W) and Information Warfare (IW), currently reside within the theater CINC's Intelligence Directorate (J2). Other related functions, such as deception are shared between the J2 and the Operations Directorate (J3). Traditionally, J-2 deception functions include determining information sources at the enemy's disposal, how the adversary will process information (including what is the adversary predisposed to believe based upon cultural or organizational biases).⁹ Although J2 personnel are uniquely positioned on the staff to access the massive volume of intelligence data, the individual suited to the "Red Cell" could conceivably be found in any directorate. Unfortunately, the compartmentalization of many "Red Cell"-type functions within the J2 tends to severely limit both the perspective and the experience base of the analysts involved. Increasingly, many traditional intelligence functional areas need to consider elements normally associated with operational planning. The opposite is also true; operational staffs increasingly must attend to matters that were traditionally within the realm of intelligence functions.¹⁰

The theater CINC "Red Cell" must expand the perspective of intelligence collection efforts *and* the fusion of both soft and hard intelligence data to derive a more complete understanding of enemy combat power. Traditional intelligence collection efforts against projected adversaries must be expanded beyond traditional platform/hardware orientation to include the intangibles that give life to enemy combat power. Open source intelligence (OSINT) and "grey" literature are critical "Red Cell" resources that should be used to mine the potentially rich lode of a potential adversary's military doctrine, professionally military discourse (such as lessons learned and after action reports) and military training institution publications (such as war college journals). All-source intelligence, including communications intelligence (COMINT), signals intelligence (SIGINT), and human intelligence (HUMINT) should be fully

employed to gain access to the training events, operational exercises and real-world operations of an adversary. Given the increased collection emphasis, the "Red Cell" must strive to understand the following foundation of enemy combat power:

- ◆ What is enemy operational doctrine? Is it mature or in a state of flux? Does the operational doctrine mesh with the quantitative and qualitative assessment of the enemy's physical military capabilities? Or is there a mismatch between doctrine and capabilities?
- ◆ Does the enemy rigidly follow operational doctrine? Or is operational initiative cultivated and rewarded?
- ◆ What does the enemy view as his critical strengths and vulnerabilities? What corrective measures (hardware, training, and doctrine) are either planned or underway to correct operational vulnerabilities? What does the enemy view as U.S. critical strengths and vulnerabilities? What enemy (hardware, training, and doctrine) are either planned or underway to exploit U.S. operational vulnerabilities?
- ◆ Does the enemy learn from his operational mistakes? Or are operational lessons learned and professional military discourse stifled?
- ◆ How are enemy operational leaders trained? Do they receive sufficient real-world experience to complement their doctrinal training?
- ◆ How do the intangibles of morale, training, cohesion, civil-military relations and culture influence enemy combat power?

Each of the above questions requires long-term, detailed analysis. Most importantly, the answers must be coordinated in a coherent, plausible manner to contribute to the CINC's improved understanding of the "whole" of enemy combat power and its operational application.

Given the diverse knowledge and analytic skills required, the proposed "Red Cell" should draw from civilian personnel (e.g., Department of State, CIA, NIMA, etc.) and uniformed military personnel on the theater CINC's staff to enhance both the technical knowledge and breadth experience available. It is beyond the scope of this paper to develop a staff manning document replete with the exact number of personnel and their accompanying military occupational specialty (MOS) data; however, an initial permanent staff of ten to fifteen personnel would comprise the standing "Red Cell". The CINC would retain the flexibility to augment the "Red Cell" from either within the CINC staff or externally. To preclude "single point" personnel shortages, each "Red Cell" staff member should be trained in several primary and secondary subject matter/skill areas to maximize analytic flexibility and provide personnel redundancy.

The theater CINC "Red Cell" will require varying degrees of external support based upon the analytic problem at hand. It is recognized that some collection methods may require tasking from higher authority, while some analytic skills are either in short supply or not resident within the theater CINC's staff. Given this reality, it is even more critical to establish the ad-hoc relationships with outside organizations and agencies upon which the "Red Cell" will initially be more dependent.

V. FUTURE THREAT ENVIRONMENT

Getting into their heads is more important than getting into their bytes

Clark L. Staten

Asymmetric Warfare, the Evolution and Devolution of
Terrorism; The Coming Challenge for Emergency and
National Security Forces

The 1999 publication of Unrestricted Warfare by two Chinese People's Liberation Army (PLA) colonels, Qiao Liang and Xiangsui Wang, highlighted the growing world-wide interest in asymmetric warfare even by countries that might be termed "conventional" peer competitors. Their work, much of which is still in translation from Chinese to English, provides an insight into foreign perceptions of the 1991 Gulf War and various Balkans operations of the late 1990's. The PLA officers suggest that American high technology weapons and C2 systems, although the envy of many militaries, can be defeated by skillful application of 'unrestricted warfare' principles. Interpreting the maxims of Sun Tzu in an Information Age context, cunning, guile and deceit are married to high-power microwave (HPM) weapons, chemical and biological warfare (CBW) and electronic attacks upon military targets, civilians, and national/international financial systems. The authors contend that a militarily inferior nation (or sub-national group) can achieve the Clausewitzian goal of forcing an enemy to submit to one's own will. They must, however, obey the first rule of unrestricted warfare: there are no rules, with nothing forbidden.¹¹

What is the outcome of the application of 'unrestricted warfare? Mass violence, injuries, and deaths will continue to occur, although they will happen in different places and in differing ways than one might currently imagine.¹² Who would be our likely opponent or coalition of opponents? It is (also) likely that a future adversary (or adversarial coalition) would come from diverse and differing vectors.¹³ Thus, not only must we defend against new threats, but the

methods and very indicators that we currently use to warn of impending hostilities or attacks must change. Indeed, our future adversary may not reveal its intentions through overt military action, but through state-sponsored terrorism or information warfare (IW) groups with tenuous links to the host state or nation.

Operational force protection, already a heightened concern for the theater commander, assumes a new intensity in the future asymmetric environment. Significant fiscal resources are devoted to “conventional” high-tech force protection methods such as theater ballistic missile defense (TBMD), yet is that the most likely or the most harmful weapon in an adversary’s arsenal? The future battleground may lay between the physical and cyber worlds in a sphere called infrastructural and informational warfare (I2WAR). I2WAR is a synthesis of attrition warfare, maneuver warfare, and guerilla warfare waged at a low intensity level against both physical and virtual infrastructures.¹⁴ Attacks may happen rapidly or over the span of months or years. Traditionally, our collective patience as military planners and operators has grown thin when a quick, decisive solution is not at hand.

Overwhelming force has been the mainstay of the “Powell/Weinberger doctrine” to deter contemporary adversaries. Yet, will overwhelming force always reap the intended advantage against an elusive and ill-defined opponent of a culturally different mindset? In attempting to define the scope of the ongoing revolution in military affairs (RMA), Andrew Latham notes that

God will no longer be on the side of the ‘big battalions’. Rather, military advantage will more likely accrue to those who restructure their military forces around rapidly reconfigurable ‘virtual task forces’ that can be quickly created, dissolved, and recombined as specific missions and battlefield dynamics require.¹⁵

The theater "Red Cell", through long-term analysis of enemy doctrine *and* capabilities, provides the flexible, adaptive lens through which the theater commander can better "see" and "understand" the future adversary in the physical and cyber environments of the twenty-first century.

VI. "RED CELL" ANALYSIS AND THE CULMINATING POINT

We are never deceived, we deceive ourselves

Goethe

Comprehension of enemy doctrine is central to accurately forming perceptions about enemy intentions. Far too often, knowledge of enemy doctrine was secondary to order-of-battle (OOB) counts and technical specifications of equipment. Failure to invest in a full understanding of enemy doctrine can reap terrible consequences; ignorance, or equally as dangerous, preconception of enemy doctrine will almost certainly lead to misjudgment of enemy intentions. The 1973 Yom Kippur War provides a concise overview of multiple failures to accurately reconcile enemy capabilities with enemy doctrine. Despite a superior intelligence collection capability, the Israelis failed to analyze the new Egyptian air defense hardware in the context of current Egyptian doctrine (airspace denial). Instead, the Israelis applied their doctrine (air superiority) to Egyptian military capabilities.¹⁶ Similarly, Israeli ground operations were conducted in an intelligence vacuum regarding Egyptian and Syrian doctrine for the employment of recently acquired anti-tank guided weapons. Given these serious lapses in knowledge about a long-term enemy, identification of the enemy operational center of gravity and exploitation of its culminating point was a prolonged process that cost thousands of unnecessary Israeli casualties and the loss of significant quantities of high technology military hardware.

To avoid similar operational lapses, the theater commander must always ask the question: how does the potential adversary plan to employ the combination of forces and doctrine in the operational realm? How can we defeat his attack? How can we maximize the success of our own attacks? The Clausewitzian concept of a culminating point remains viable today and is an especially critical element of warfare at the operational level.¹⁷ In examining the three questions below, the Clausewitzian concept of culmination will be further accentuated by the application of Sun Tzu's simple maxim: know thy enemy. The "Red Cell", as proposed above, will provide improved knowledge of the enemy, both in capabilities and doctrine, and enable the theater CINC to better "think", in all the implications of the word, like the twenty first century adversary.

A. What is the enemy trying to achieve and how is he trying to achieve it?

U.S. intelligence doctrine asserts that the Joint Force Commander (JFC) will seek to get inside the adversary's decision making cycle. More important for the operational commander to ask is, "What is the enemy's decision making cycle? How does it function?" Particularly with regard to decision-making logic, a non-Western, asymmetric opponent will differ not only in the decision made but how it is made. Rationality and precise cost-benefit analysis should not be implied. During the 1973 Yom Kippur War, Israel assumed that its Arab opponents would not undertake war. How could it be viable option when victory against the superior Israeli forces was not assured? As the Yom Kippur War proved, the Arab governments were willing to lose the war in order to attain their political goals. Paradoxically, in terms of Western experience, political aims are frequently obtained even through defeat.¹⁸ Thus the range of possible enemy intentions considered by the theater commander must be considered within the cultural, political,

military and doctrinal framework of the enemy society. The equation of enemy political goals with military means is a fertile ground for "Red Cell" analysis.

How does the enemy view our friendly capabilities? One tends to over-estimate one's capabilities, on which complete information is available, and underestimate the opponent's material and doctrinal capabilities.¹⁹ If this is the case, then the enemy may be inspired to aggression. Or he may elect operations in an asymmetric arena where the cost-benefit calculus is even further to his credit. This will be an ongoing challenge for the "Red Cell": to determine how an enemy sees us. The enemy perception of our friendly centers of gravity, strengths and weaknesses, and critical vulnerabilities will, if properly analyzed by the "Red Cell", provide the theater CINC with the possible answers to the next question: how can the enemy obtain our culmination?

B. What is the enemy exploiting to achieve friendly culmination?

Our own military self-estimate will color our perceptions of enemy response to our own military force. A significant danger is that one incorrectly concludes that the enemy is effectively deterred by one's supposed superiority, while in reality one's forces, rather than serving as a deterrent, are actually viewed by the enemy as a target. A deterrent can make a superb target.²⁰ During the early years of the Vietnam War, the willingness of U.S. ground forces to commit to set piece battles and fixed operating bases, predicated upon a conventional (Western) estimation of military power, created lucrative targets for the more mobile, less logistically dependant Viet Cong forces. Yet the Viet Cong did not generally engage in force-on-force engagements -- this was contrary to their doctrine. In the long term, the Viet Cong sought American culmination through the gradual depletion of forces and the erosion of

American military morale. Again, it is not enough merely to understand the strictly military capabilities of an opponent's force; the doctrinal framework within which the forces operate is an element as critical as land, sea or air. This is where the theater "Red Cell" can provide a crucial insight.

By focusing upon the complete package of enemy technical capabilities and enemy doctrine, the "Red Cell" can identify potential critical vulnerabilities of friendly forces that, seen through enemy eyes, may provide the means to induce the culmination of our forces.²¹ A key area in our current maneuver warfare doctrine is logistics. Particularly at the operational level of war, logistics is a critical ingredient in identifying success or failure.²² The "Red Cell", employing multi-discipline analysis consistent with enemy doctrine and capabilities, can identify probable critical logistics vulnerabilities available for enemy exploitation. Sustainment and synchronization of logistics with combat operations can forestall culmination.²³ Early identification of critical vulnerabilities, as seen by a potential adversary, can serve as a timely operational risk assessment of the theater commander's own operational functions.

C. How is the enemy vulnerable to premature culmination?

Using our own operational doctrine taken from Joint Pub 5-00.1 (JTTP for Campaign Planning), we can modify the statement "campaign plans must recognize probable culmination and identify ways to extend it" to reflect an application towards a potential enemy. In this case, the statement would read: "assessment of enemy campaign plans must emphasize enemy culmination and identify ways to accelerate it".

From this perspective, the "Red Cell" can uniquely serve the operational commander by providing a true combat assessment of the enemy that places a premium on analytical insight

vice "information collection". More concretely, did efforts such as body count provide an accurate insight towards enemy culmination in Vietnam? Americans overestimated the effect of casualties upon the enemy and were not able to predict culmination. Similarly, in Operation DESERT STORM, attempts were made to correlate Iraqi combat power strictly by numbers of armored vehicles and artillery pieces destroyed by Allied airpower. The failure to assess these materiel losses within the context of enemy morale and logistics support resulted in an over-inflated estimate of Iraqi combat power which, in turn, consumed resources which could have been applied to hasten Iraqi culmination.

Critical to identifying the culminating point is a clear appreciation of the center of gravity of each side.²⁴ The theater CINC "Red Cell" is focused upon identification of the enemy's operational center of gravity.²⁵ Once correctly identified, the operational center of gravity – critical vulnerability linkage can be analyzed. It is important to note that the culminating point is more frequently associated with offensive operations. Yet once friendly forces begin offensive operations, the operational commander must be attuned to the enemy's defensive culminating point as well. As Major Stephen Duncan noted in his monograph, Intelligence and the Defensive Culminating Point, the Allied failure to recognize the German action during the Battle of the Bulge as a counter-offensive stimulated by defensive culmination resulted in a nearly fatal shift in operational initiative from the Allies to the Germans. The theater "Red Cell" must remain focused upon both the exploitation of offensive and defensive culmination.

In addition to identifying the means by which an enemy can be forced to culminate prematurely, friendly forces must be attuned to the operational effects of their efforts. That is to say, a potential enemy may show the signs of culmination in a manner different than that of our own forces. One can define it (the culminating point), we simply don't know it when we see it.²⁶

This is particularly true when dealing with a less technologically advanced, non-Western opponent. Consequently, the "Red Cell" must identify the most likely doctrinal, physical, and moral "indicators" that will signal an adversary's culmination. It is important to always remember that it is combat power that culminates.²⁷ It is equally important to remember that in the twenty first century that both combat power and its signs of culmination may vary greatly from what we know today. The "Red Cell" must be at the forefront of our adaptive efforts to better understand culmination and its indicators in the future.

VII. POTENTIAL "RED CELL" CHALLENGES

People have a longer lead time than machines

Robert D. Steele

Takedown: The Asymmetric Threat to the Nation

Americans persistently seem to assume that other peoples think basically the same as they do.²⁸ Even *JV 2010* suggests that the United States can continue to approach warfare in the future by embracing the fundamentals that have marked its successes for most of the twentieth century.²⁹ Given this assumption, the first challenge for the proposed theater "Red Cell" will be to even consider its establishment. The fundamental principle that supports the "Red Cell" is the recognition that there is a better way to "place ourselves in the other person's moccasins" than our current methodology and its emphasis on computer modeling and simulation. As James der Derian notes,

... digitized wargames, twice removed by scripted strategies and technological artifice from the bloody reality of war, take simulation into another realm, leaving behind the reality principle which distinguishes the feigned from the real, entering the realm of the hyperreal.³⁰

Thus, much as with the ongoing debate about network-centric warfare (NCW), successful adaptation of the proposed theater "Red Cell" concept will require an accompanying organizational and cultural change which inspire the attendant debate, experimentation, and evolution that accompany any successful concept.³¹

Given the approval to stand-up a theater "Red Cell", there must be a shared understanding between the Joint Chiefs of Staff, service chiefs, and theater CINCs that the "Red Cell" will require a long-term commitment to achieve the depth of knowledge required to plausibly simulate even a single major opponent. This depth of knowledge must then be expanded to cover the prioritized spectrum of potential adversaries within a given theater; no mean feat considering the paucity of relevant information concerning less well-known nations (or sub-national groups) with possible hostile asymmetric or asynchronous responses. The knowledge skills and experience base of prospective "Red Cell" members must reflect a Department of Defense-wide commitment to increased foreign language training, advanced education (particularly in soft areas such as history, political science, etc.) and the hands-on value of overseas tours to professional military development. Until the resource pool of prospective "Red Cell" candidates grows, the proposed theater "Red Cell" will clearly be personnel-intensive. It will certainly compete with the traditional analytic community, the Foreign Area Officer (FAO) program and "operators" for personnel who possess the requisite language skills, visionary mindset, and creative thinking (not to mention a somewhat Machiavellian nature).

The theater "Red Cell" must be empowered with the authority to expand intelligence collection tasking efforts into new arenas to derive a more complete understanding of enemy combat power. Given the nature of the "Red Cell" analysis perspective, collections should focus

on the “why?” and “how?” in addition to the traditional “how many?” OSINT, “grey” literature, professional military education (PME) documents, exercise after-action reports (AARs), military promotion statistics, and biographical data of enemy operational commanders are just a few of the rich sources data concerning an enemy’s intangible combat power that are currently under-exploited. The theater “Red Cell” will draw heavily upon foreign language translation resources to access these insightful sources which reflect the human element of an enemy’s military power.

Finally, even given the emphasis upon the human element to analyze data in non-traditional ways, the “Red Cell” itself is capable of falling prey to self-deception by means of the very same pitfalls that it was designed to avoid, such as current expectations and cognitive biases. In essence, who would “Red Cell” the “Red Cell”? This is a question that, in part, will remain the talisman for the “Red Cell” – how to avoid complacency, stagnation and self-delusion? The “Red Cell” environment must fully support the internal freedom to challenge existing intelligence/operational assumptions and, equally important, respond to external requests or challenges of “Red Cell” assumptions. Insularity (or detachment) must be avoided. One mechanism to reduce the likelihood of self-deception would be the cross-pollination (evaluation) of a given theater “Red Cell” by that of a different theater. Joint experimentation and an iterative design process are the keys to developing a balanced “Red Cell” “organism”. The Commander-in-Chief, U.S. Joint Forces Command (CINCFJC) staff would be a logical lead agency to test the validity and define the operational concept of the “Red Cell”. A vehicle for “Red Cell” development would be war games, similar in concept to the “Global” series of war games hosted by the Naval War College (NWC), sponsored and analyzed in conjunction with the Joint Warfare Analysis Center (JWAC) and service-related warfare entities such as the Navy Warfare Development Command (NWDC). If the “Red Cell” concept was approved and

implemented, JFC should act as the trusted agent to ensure evaluation and cross-pollination among theater staffs.

Foremost, the theater "Red Cell" must stimulate flexible operational thinking among the theater CINC staff. Community adherence to a single "concept" can prove disastrous to an operational commander, as evidenced by Israeli military adherence to their concept of Egyptian offensive operations in 1973. Ignorance of new enemy doctrine, compounded by denial of key strategic and operational level indicators, was married to a fixation upon a single operational model of Egyptian offensive operations. Skillful Egyptian use of operational deception, operational movement, and operational command and control further contributed to Egyptian initial successes during the Yom Kippur war. In the final analysis, the Israelis deceived themselves.³² Only after Israeli intelligence re-evaluated both new enemy doctrine and new enemy technical capabilities did Israeli military commanders exploit recently-found Egyptian weaknesses did the Israelis cause a premature Egyptian culmination.³³

Ruthless self-scrutiny and decisive action upon lessons learned must sustain the analytic environment, both organizational and cultural, that will permit the "Red Cell" to creatively and accurately "what if" against a variety of adaptive adversaries.

VIII. CONCLUSION

At a time when the United States stands as the world's only global power, it is more important than ever that American theater commanders be more open to evidence and ideas that are at variance with our preconceptions.

MAJ Jay L. Hatton, USMC,
We Deceive Ourselves

The belief that, at any given time, there is one right way to organize an armed force and, basically, one right way to use it has had persistent appeal throughout most of U.S. history.³⁴ Yet the twenty-first century, as outlined above, is fraught with uncertainties and hostile challenges from adversaries unlike our previous opponents. Can we rely exclusively on new technology, married to the analytical posture of the status quo, to meet future threats across the spectrum of conflict? We can, and should, not. Dr Stephen J Blank observes that,

Given the hubris that accompanies contemporary American military writing and thinking, *the likelihood of being surprised by enemy capabilities* (emphasis added), if not ultimately by his intentions, is a very real one.³⁵

We will need organizations and processes that are agile enough to exploit emerging technologies and *respond to diverse threats and enemy capabilities* (emphasis added).³⁶ The National Defense Panel (NDP) recognized that asymmetric "superiorities", such as precision guided munitions and network-centric warfare, carry with them a variety of vulnerabilities, both distinct and hidden, available for exploitation by a future adversary. We have to aggressively experiment to identify potential vulnerabilities and determine how to minimize them. What we do not need to do is focus on known and familiar threats that we can effectively deal with.³⁷ Unfortunately, the law of unintended consequences often imposes a more severe penalty upon the technologically superior culture, in this case, the U.S. military. More disturbingly, the boundaries between the battlefield and what is not the battlefield, weapons and non-weapons,

and even combatants and non-combatants will become increasingly blurred as an adversary seeks an asymmetric victory against the U.S. or an U.S.-led coalition. The NDP called for aggressive experimentation to identify potential vulnerabilities and determine how to minimize them or counter and adversary's response to them. The proposed theater "Red Cell", culturally attuned and organizationally flexible, is an invaluable analytic tool available to the theater CINC to meet the new challenges described by the NDP.

Ultimately, the bloody history of warfare, be it conventional or asymmetric, is about the dynamic interaction of opponents each identifying strategic, operational or tactical vulnerabilities and trying to exploit them.³⁸ The "Red Cell", as described in this paper, can provide the theater CINC a new perspective from which to ascertain and deflect and adversary's exploitation attempts while maximizing the success of his or her own exploitations of enemy vulnerabilities. The theater "Red Cell" is not about science fiction or techno-thriller threats; it can more accurately address the threats posed by culturally and technologically distinct adversaries. Reality is usually not anticipated – in other words, reality is challenging enough.³⁹ Is the theater CINC prepared to alter his or her operational perception of "traditional" military reality to meet the diverse challenges of twenty-first century warfare?

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3. For the purposes of this paper, the concept of a culminating point is applicable to both the offense and the defense. Culmination is defined as the juncture in time and space at which the offensive becomes overextended and the offensive combat power no longer sufficiently exceeds that of the defender to allow successful continuation of the offensive (Vego, On Operational Art, 249).
4. LTCOL Edward J. Felker, USAF, Airpower, Chaos, and Infrastructure: Lords of the Rings, Chairman of the Joint Chiefs of Staff Strategic Essay Contest: Essays 1998, (Washington D.C.: National Defense University Press, 1998), 65.
5. Information Warfare Red Team, [<http://www.acq.osd.mil/at/a6-irwt.htm>] (20 Dec 1999), 1.
6. COL Charles J. Dunlap, JR, USAF, Joint Vision 2010: A Red Cell Assessment, (*Joint Forces Quarterly*, Autumn/Winter 1997/1998), 49.
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8. Peter Baxter, Program Manager, Jane's Consultancy and Special Research Group. Interviewed by author, 20 December 1999, Washington D.C., via e-mail.
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14. Michael Wilson, Infrastructural Warfare Threat Model, (1996. [<http://www.7pillars.com/papers/MT.html>] (20 Dec 1999)), 2.
15. Andrew Latham, Understanding the RMA: Braudelian Insights into the transformation of Warfare, (Geneva, Switzerland: Programme for Strategic and International Studies, 1999), 45.
16. Michael Handel, Perception, Deception and Surprise: The Case of the Yom Kippur War, (Jerusalem: The Leonard Davis Institute for International Relations, 1976), 50.
17. Milan T. Vego, On Operational Art, (Newport, RI: Naval War College, 1999), 255.
18. Handel, Perception, Deception and Surprise: The Case of the Yom Kippur War, 24.
19. Ibid., 20.
20. Ibid., 22.
21. Handel observes that the operational commander with little intelligence related experience (knowledge of enemy doctrine *and* capabilities) may fall victim to the belief that what they know about their own problems and limitations is known to the enemy. This erroneous assumption may lead to the identification of critical vulnerabilities significantly different than those actually exploited by the enemy.
22. COL George S. Webb, USA, The Razor's Edge: Identifying the Operational Culminating Point of Victory, (Naval War College, Newport RI, May 1995), 16.
23. Joint Pub 3-0: Doctrine for Joint Operations, (Washington D.C.: Department of Defense, 1995), III-29.
24. Webb, The Razor's Edge: Identifying the Operational Culminating Point of Victory, 16.
25. As well as determining the enemy's operational center of gravity, the "Red Cell" can provide valuable insight into the possible enemy perception of one's own operational center of gravity. This enemy perception of one's own center of gravity must enter any "Red Cell" analysis of enemy attempts at inducing friendly culmination.
26. Webb, The Razor's Edge: Identifying the Operational Culminating Point of Victory, 4.
27. Vego, On Operational Art, 255.

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30. James Der Derian, The QDR, the Theater of War and Building a Better Rat Trap, (June 1997. [<http://www.nyu.edu/globalbeat/usdefense/derderian0697.html>] (20 Dec 1999)), 6.
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